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## Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A method for determining the location of a mobile station, comprising:

receiving a plurality of simulcast signals having substantially identical information from respective base stations;

determining relative time of arrival information for the received plurality of simulcast signals; and

determining the position of the mobile station.

- 2. (Original) The method according to claim 1, further including determining the relative time of arrival information using characteristics inherent in the received signal.
- 3. (Original) The method according to claim 2, wherein the inherent characteristics of the received signal include time dispersion due to simultaneous transmission of the substantially identical simulcast signals.
- 4. (Original) The method according to claim 3, wherein the received simulcast signals having an OFDM modulation format.
- 5. (Original) The method according to claim 4, further including estimating channel frequency response.
- 6. (Original) The method according to claim 5, further including transforming the channel frequency response to obtain the relative time of arrival information.
- 7. (Original) The method according to claim 1, further including receiving base station ID information in the respective simulcast signals.

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- 8. (Original) The method according to claim 1, further receiving GPS signals for determining the relative time of arrival information.
- 9. (Original) The method according to claim 1, further including utilizing Doppler shift information associated with movement of the mobile station to determine the position of the mobile station.
- 10. (Original) The method according to claim 1, further including computing a locus of points having a distance from first and second ones of the plurality of base stations that differs by a signal time of arrival difference for signals from the first and second ones of the plurality of base stations.
- 11. (Original) The method according to claim 10, further including further loci of points for further pairs of base stations.
- 12. (Original) The method according to claim 1, further including computing the relative time of arrival information using differential in frequency information.
- 13. (Original) The method according to claim 1, further including receiving a signal from a first one of the plurality of base stations to a second one of the plurality of base stations for identifying the simulcast signals from respective first and/or second ones of the plurality of base stations.
- 14. (Original) The method according to claim 1, further including transmitting the mobile station position from the mobile station to one or more of the plurality of base stations.

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- 15. (Original) The method according to claim 14, further including transmitting the mobile station position from the one or more plurality of base stations to a network server associated with the one or more plurality of base stations.
- 16. (Original) The method according to claim 1, further including broadcasting information associated with the mobile station position.
- 17. (Original) The method according to claim 15, further including broadcasting location-specific advertisements.
- 18. (Previously Presented) A method for receiving location information for a mobile station, comprising:

transmitting simulcast signals having substantially identical information to the mobile station; and

receiving mobile station location information from the mobile station determined from relative time of arrival information for the simulcast signals.

- 19. (Original) The method according to claim 18, further including transmitting simulcast OFDM signals.
- 20. (Original) The method according to claim 19, further including transmitting locationspecific information to the mobile station.
- 21. (Previously Presented) A mobile station, comprising:

a receiver for receiving simulcast signals having substantially identical information from a plurality of base stations; and

a processor for determining time of arrival information for the received simulcast signals and identifying a location of the mobile station.

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- 22. (Original) The mobile station according to claim 21, wherein the simulcast signals are OFDM signals.
- 23. (Original) The mobile station according to claim 21, further including a transmitter for transmitting the mobile station location to one or more of the plurality of base stations.
- 24. (Previously Presented) A wireless network for providing location specific information to a mobile station, comprising:
- a plurality of base stations for transmitting simulcast signals having substantially identical information; and
- a mobile station for receiving the simulcast signals and determining a location of the mobile station.
- 25. (Original) The network according to claim 24, wherein the simulcast signals are OFDM signals.
- 26. (Original) The network according to claim 24, further including at least one network server for providing location-specific information to the mobile station based upon mobile station location information provided to one or more of the plurality of base stations.
- 27. (Previously Presented) A wireless network, comprising:
- a plurality of base stations for transmitting simulcast signals having substantially identical information to mobile stations and receiving mobile station location information to broadcast location specific information to the mobile stations.